

AMENDMENTS TO THE CLAIMS

Please amend Claims 1 ,7 and 10-11, and withdraw Claims 19-40. Following entry of the amendments in this Amendment, the pending claims in the present application read as follows:

1 1. (Currently Amended) A system for processing a data file that includes a
2 plurality of versioned records which are of a fixed length, said system comprising:
3 an input vertical stack processor including a record transitioning routine for
4 determining when said one record is a previous record version and for transitioning
5 the previous record version of said one record into a current record version of said one
6 record for use in creating an application input file, wherein each of said record contain
7 at least one field containing data and a reserve area for accommodating changes, said
8 input vertical stack processor allowing individual records to grow horizontally by
9 using reserved unused space and vertically by adding records to the set without
10 requiring all existing users to make synchronized changes; and
11 an application processor for processing said application input file.

1 2. (Original) The system of claim 1, wherein said record transitioning
2 routine reformats previous version data fields of said one record to current data fields
3 of said one record.

1 3. (Original) The system of claim 1, wherein said input vertical stack
2 processor validates said one record prior to transitioning said one record.

1 4. (Original) The system of claim 3, wherein said input vertical stack
2 processor includes a structure editing routine for providing file structure editing of
3 said versioned records of said data file.

1 5. (Original) The system of claim 1, wherein each input record of said
2 plurality of records includes a version number which indicates if a record is a current
3 version or a previous version.

1 6. (Original) The system of claim 5, wherein said record transitioning
2 routine uses the version number to determine if a record is a previous version.

1 7. (Currently Amended) ~~The system of claim 6,~~ A system for processing a
2 data file that includes a plurality of versioned records which are of a fixed length, said
3 system comprising:

4 an input vertical stack processor including a record transitioning routine for
5 determining when said one record is a previous record version and for transitioning
6 the previous record version of said one record into a current record version of said one
7 record for use in creating an application input file, wherein each input record of said
8 plurality of records includes a version number which indicates if a record is a current
9 version or a previous version, wherein said record transitioning routine uses the
10 version number to determine if a record is a previous version;

11 an application processor for processing said application input file; and
12 ~~and including~~ an output vertical stack processor responsive to said application
13 processor for producing a destination file including a plurality of records wherein
14 each record includes at least current record versions for each record of said data file,
15 and for writing the current record version of each record to the destination file.

1 8. (Original) The system of claim 7, wherein said output vertical stack
2 processor supplements data contained in at least one record of said plurality of records
3 with data for at least one previous version of said one record prior to writing said one
4 record to said destination file.

1 9. (Original) The system of claim 8, wherein said output vertical stack
2 processor supplements data contained in said one record with data for all of the
3 previous versions of said one record prior to writing said one record to said
4 destination file.

1 10. (Currently Amended) A system for producing a destination data file that
2 includes a plurality of versioned records which are of a fixed length, said system
3 comprising:

4 an application processor for producing the current version of each record of
5 said data file; and

6 an output vertical stack processor using the current version of at least one
7 record of said data file and information contained in a static memory map to produce
8 a record which includes current version data supplemented with data for at least one
9 previous version of said one record, and for writing the record including current
10 version data and previous version data to the destination data file, wherein each of
11 said record contain at least one field containing data and a reserve area for
12 accommodating changes, said output vertical stack processor allowing individual
13 records to grow horizontally by using reserved unused space and vertically by adding
14 records to the set without requiring all existing users to make synchronized changes.

1 11. (Currently Amended) ~~The system of claim 10,~~ A system for producing a
2 destination data file that includes a plurality of versioned records which are of a fixed
3 length, said system comprising:

4 an application processor for producing the current version of each record of
5 said data file; and

6 an output vertical stack processor using the current version of at least one
7 record of said data file and information contained in a static memory map to produce

8 a record which includes current version data supplemented with data for at least one
9 previous version of said one record, and for writing the record including current
10 version data and previous version data to the destination data file, wherein said output
11 vertical stack processor supplements the current version data with data for all previous,
12 versions of said one record, in combination with the current version, of said one
13 record of said data file prior to writing the record including current version data and
14 all previous version data of said one record to the destination file.

1 12. (Original) A method for processing a data file that includes a plurality
2 of input records which are of a fixed length, said method comprising the steps of:
3 reading at least one of said input records to obtain from said one input record, a
4 version number for said one input record, the version number indicating whether said
5 one input record is a current version or a previous version of said one input record;
6 using said version number to determine if said one input record is a current
7 version or a previous version, and
8 when said one input record is a previous version, transitioning said one input
9 record to a current version of the input record by
10 moving said one input record to a first work area of a memory, the first
11 work area defining data fields for said one input record;
12 initializing a second work area of the memory with default values for
13 the current version of said one input record, with the default values contained
14 in data fields of the current version of said one input record; and
15 moving data contained in the data fields of said one input record in said
16 first memory work area to corresponding data fields of the current version of
17 said one input record in said second memory work area, whereby said second
18 memory work area contains said one input record transitioned to the current
19 version of said record.

1 13. (Original) The method of claim 12, wherein each of said input records
2 includes a data receiving portion and a reserve area, and including the step of
3 determining for at least said one input record if at least a portion of the reserve area
4 defined for said previous version of said one input record is being used, and halting
5 processing of said data file when any portion of said defined reserve area is being
6 used.

1 14. (Original) The method of claim 12, including the step of reformatting
2 data fields of said one input record to current data fields after data contained in the
3 data fields of said one input record in said first memory work area have been moved
4 to corresponding data fields of the current version of said one input record in said
5 second memory work area.

1 15. (Original) The method of claim 14, wherein reformatting data fields of
2 said one input record includes moving data from a first data field in said second
3 memory work area to a second data field in said second memory work area.

1 16. (Original) The method of claim 12, wherein initializing the second
2 memory work area with default values includes the steps of reading a record
3 definition for the current version of said one input record to obtain the default values
4 for the current version of said one input record, and copying the default values for the
5 current version of said one input record to said second memory work area.

1 17. (Original) The method of claim 12, including the step of writing the
2 transitioned version of said one input record to an application data file.

1 18. (Original) The method of claim 17, and when said one input record is
2 the current version, moving said one input record to a work area of the memory, and
3 writing said one input record, without transitioning, to an application file.

1 19. (Withdrawn) A method for making a change in the record format of a
2 record of a data file that includes at least a first data field, said method comprising:
3 defining for said record a reserve area of a given length for accommodating a
4 change in the record format of a first version of said record;
5 assigning a version number to said record when said record is initially created;
6 creating a second data field using a portion of said reserve area to
7 accommodate the change in the record format of said record while all other fields of
8 said record remain unchanged and the length of said record remains unchanged; and
9 changing the version number for said record to indicate that said record is a
10 second version.

1 20. (Withdrawn) The method of claim 19, wherein said first data field is
2 expanded by creating said second data field of said record, and including the step of
3 copying data contained in said first data field to said second data field, and filling
4 unused portions of said second data field.

1 21. (Withdrawn) The method of claim 19, wherein creating said second data
2 field includes creating a data field which contains a change in attributes for data
3 contained in an existing data field.

1 22. (Withdrawn) The method of claim 19, and including the steps of
2 determining if said reserve area of said record is of insufficient size to accommodate a
3 change in the record format for said record, and creating an additional record to

4 accommodate a change in said record format if said reserve area is of insufficient size
5 to accommodate the change.

1 23. (Withdrawn) A method for indicating a change in the record format of
2 records of a data file that includes a plurality of records, said method comprising:
3 establishing a fixed length for said records of said data file, with each record
4 including a data receiving portion and a reserve area, said data receiving portion
5 including at least one field containing data;
6 assigning a version number to at least one record of said data file for indicating
7 that said one record is a first version of said record;
8 creating a second version of said one record to accommodate a change in the
9 record format of said one record, wherein the second version of said one record
10 includes a further field formed by increasing the data receiving portion of said one
11 record while reducing said reserve area of said one record; and
12 assigning a different version number to the second version of said one record.

1 24. (Withdrawn) A method for formatting a data file that includes a
2 plurality of records, said method comprising the steps of:
3 establishing a fixed length for said records of said data file;
4 defining for each record, a data receiving portion including at least one field
5 containing data;
6 defining for each record a reserve area of a given length for accommodating a
7 change in the record format of a first version of one of said records by creating a
8 further field of a given length using at least a portion of said reserve area of said one
9 record; and
10 assigning a version number to each record of said data file to indicate whether
11 said record is an original version or a changed version.

1 25. (Withdrawn) The method of claim 24, including the step of expanding a
2 data containing field of said one record by creating a further field using a portion of
3 said reserve area of said one record.

1 26. (Withdrawn) The method of claim 24, including the step of increasing
2 the number of data containing fields of said one record by creating a further field
3 using a portion of said reserve area of said one record.

1 27. The method of claim 24, and including the steps of changing an attribute
2 of data contained in a data containing field of said one record by creating a further
3 field using a portion of said reserve area of said one record, and transferring the data
4 contained in said one data containing field of said one record to said further field of
5 said one record.

1 28. (Withdrawn) The method of claim 24, and including the steps of
2 determining if said reserve area of said one record is of insufficient size to
3 accommodate a change in the record format for said one record, and creating an
4 additional record to accommodate the change in the record format of said one record
5 if said reserve area of said one record is of insufficient size to accommodate the
6 change.

1 29. (Withdrawn) The method of claim 24, wherein said plurality of records
2 of said data file include different types of records including a file header record, at
3 least one detail record and a file trailer record, and including the step of assigning to
4 each record a record identifier which indicates the type of record.

1 30. (Withdrawn) The method of claim 29, wherein said plurality of records
2 of said data file further include at least one batch header record and at least one batch

trailer record, and including the step of assigning to the batch header record and the batch trailer record a record identifier which indicates the type of record.

31. (Withdrawn) A method for making a change in the record format of records of a data file, each of said records including at least a first data field, said method comprising:
defining for each of said records a reserve area of a given length for accommodating a change in the record format of a first version of said records;
assigning a version number to each of said records when said records are initially created;
determining if said reserve area of at least one of said records of a record set is large enough to accommodate a change in the record format of said one record;
creating an additional record for said record set to accommodate a change in the record format of said one record if said reserve area of said one record is of insufficient size to accommodate the change; and
assigning a version number to said additional record.

32. (Withdrawn) The method of claim 31, including expanding a data field of any one of said records by creating a further record having a further data field, copying data contained in said one data field to said one data field, and filling unused portions in said further data field.

33. (Withdrawn) The method of claim 31, wherein creating said additional record includes creating a further data field which contains a change in attributes for data contained in an existing data field of one of said records.

1 34. (Withdrawn) A method for formatting a data file that includes a
2 plurality of records, said method comprising the steps of:
3 establishing a fixed length for said records of said data file;
4 defining for each record, a data receiving portion including at least one field
5 containing data;
6 defining for each record, a reserve area of a given length for accommodating a
7 change in the record format of a first version of one of said records by creating a
8 further field of a given length using at least a portion of said reserve area of said one
9 record;
10 determining if said reserve area of said one record is large enough to contain
11 said further field;
12 creating an additional record for the record set to accommodate changes in the
13 content of said one record after said reserve area if said one record is insufficient size
14 to contain said further field; and
15 assigning a version number to each record of said data file.

1 35. (Withdrawn) The method of claim 34, including expanding a data field
2 of any one of said records by creating a further record having a further data field,
3 copying data contained in said one data field to said one data field, and filling unused
4 portions in said further data field.

1 36. (Withdrawn) The method of claim 34, wherein creating said additional
2 record includes creating a further data field which contains a change in attributes for
3 data contained in an existing data field of said data file.

1 37. (Withdrawn) A data file comprising:

2 a plurality of records, each record including a data receiving portion having at
3 least one field containing data, and a reserve area for accommodating a change in the
4 record format of one version of one of said records by creating a further field using at
5 least a portion of said reserve area, each record of said data file having a version
6 number, and wherein the length of each record of said data file is fixed.

1 38. (Withdrawn) The data file according to claim 37, wherein said plurality
2 of records include different types of records including a file header record, at least one
3 detail record, and a file trailer record, each record having a record identifier indicating
4 the record type.

1 39. (Withdrawn) The method of claim 38, wherein said plurality of records
2 of said data file further include at least one batch header record and at least one batch
3 trailer record, the batch header record and the batch trailer record each having a
4 record identifier indicating the record type.

1 40. (Withdrawn) The data file according to claim 37, wherein all of said
2 records of said data file have the same length, said reserve area allowing the creation
3 of further fields for said records of said data file without increasing the length of said
4 records of said data file.